

Remarks

The office action of November 9, 2007 ("Action") has been carefully reviewed and these remarks are responsive thereto. Claims 1-16 and 18-23 have been amended. Claims 1-26 are pending. Reconsideration and allowance of this application are respectfully requested.

Specification Objection

The Action objects to the specification stating that the title is not descriptive.

The title has been amended to recite "Fixed Length Cluster-Filtering to Filter Clusters of Discrete Segments of Data." Applicant submits that the amended title is descriptive and respectfully requests that the objection be withdrawn.

Rejection under 35 U.S.C. § 103(a)

The Action rejects claims 1-26 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,951,651 to Lakshman et al. ("Lakshman") in view of U.S. Patent No. 5,790,554 to Pitcher et al. ("Pitcher"). Applicant respectfully traverses.

1. Response to the Rejection of Claim 1

For at least the following reasons, the Action has not established a *prima facie* case of obviousness under over 35 U.S.C. § 103(a) to reject claim 1 over Lakshman in view of Pitcher.

Amended claim 1 recites "processing the identification to select at least two filters from a plurality of fixed length filters to filter the at least two clusters," with those two clusters being within a packet. Emphasis added. To reject the claimed selecting, the Action cites column 4, lines 54-55 and column 5, lines 7-16 of Lakshman, reproduced below:

Consequently, from the bit-map vectors stored in memory the potential filters can be ascertained.

...

The process of determining potential filters by comparison with the window intervals w_i are preferably performed in parallel, i.e., simultaneously. Thus, for each dimension k specified in the header, the corresponding bit-maps of all of the

potential applicable filters is retrieved for each of the dimensions. Finally, from each of the bit-map vectors for dimensions $k=1$ through $k=n$, an intersection operation is performed to determine those filters in common, and if any common filter(s) is found, applying that rule(s) to determine the suitable action to be taken for that packet.

By this citation, the Action appears to be alleging Lakshman's disclosure of determining if any "common filter(s)" are found somehow discloses the claimed selecting of at least two fixed length filters to filter at least two clusters within a packet. Applicant respectfully disagrees. The Action has not shown that Lakshman discloses processing an identification to select two or more of the common filters to filter at least two clusters of discrete segments of data within a packet in the manner claimed.

Lakshman does not disclose any such selection of more than one common filter to filter a packet. Instead, Lakshman indicates that "one of the potential filter rules having that *commonality* will be applied to the packet depending upon the priority of that rule." Lakshman at col. 2, ll. 46-49 (emphasis added); see also *id.* at col. 5, ll. 28-34; at col. 2, ll. 23-25 ("The invention is a hardware implemented filter that designates one of a plurality of filter rules")(emphasis added); at col. 5, ll. 61-64 ("the filter rule of the *highest priority is invoked*") (emphasis added); at col. 6, ll. 28-31 ("the CPU will *apply the rule of highest priority*, and performs the action dictated by the rule upon the received packet") (emphasis added). This differs from claim 1 which recites "processing the identification to select at least two filters from a plurality of fixed length filters to filter the at least two clusters." Pitcher also fails to teach or suggest any such processing of an identification to select at least two filters. Therefore, the Action has not established a *prima facie* case of obviousness under 35 U.S.C. § 103(a) as Lakshman and Pitcher, alone or in combination, fail to teach or suggest all of the features recited in the claimed invention.

Moreover, the Action improperly reasons that one of ordinary skill in the art would have combined Lakshman and Pitcher. The Action alleges that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to combine the teachings of Lakshman and Pitcher "because doing so would allow for Lakshman to filter data using fixed length filters and use an offset value to properly filter the data at the beginning of the data of interest." Action at 3. Applicant respectfully disagrees for at least the following two reasons.

First, although the Action suggests that Lakshman suffers from a problem with properly filtering data at the beginning of the data of interest, Lakshman does not suggest this problem. Lakshman implies that its system provides a packet filtering mechanism without service degradation and at previously unattained speeds. *Id.* at col. 2, ll. 12-19, col. 6, ll. 51-53. If these results are in fact achieved, it is not clear how Lakshman's system would suffer from the alleged problem with properly filtering data at the beginning of the data of interest. The Action has not shown that Lakshman suffers from any such problem, and hence the Action's reasoning for combining Lakshman with Pitcher is unsupported.

Second, the teachings of Lakshman and Pitcher clearly suggest that they are not combinable with one another. The concepts set forth in Pitcher are analogous to the prior art systems Lakshman explicitly is trying to avoid. Lakshman discusses the problem of prior art systems where for each packet received by a router, the router successively applies every rule to the packet. *Id.* at col. 2, ll. 3-6. Lakshman indicates that prior art systems which successively apply every rule are "time consuming, and hence will decrease throughput and compromise quality of service." *Id.* at col. 1, line 65-col. 2, line 9. To overcome this problem, Lakshman provides a system to designate and apply one of multiple filters to a packet. *Id.* at col. 2, ll. 22-24. In contrast, Pitcher discloses a system that permits a network administrator to apply multiple

filters to a packet in a sequential manner. Pitcher at col. 6, ll. 47-49. In effect, the combination proposed in the Action would require a modification of Lakshman to be like prior art systems, such as Pitcher, that Lakshman is specifically trying to avoid. Lakshman at col. 1, line 65-col. 2, line 9.

For at least the reasons set forth above, Applicant submits that claim 1 is allowable over the prior art of record.

2. Response to the Rejection of Claim 2

Claim 2 depends from claim 1 and is allowable for the same reasons as claim 1. Moreover, claim 2 recites “wherein the plurality of fixed length filters have a common length.” The Action relies on column 4, lines 30-33 of Lakshman discussing vectors that represent how many filters there are in Lakshman’s system. Action at 3. Applicant respectfully disagrees. A vector representing the number of filters is clearly not a disclosure of filters having a common length. Lakshman’s vector representing the number of filters in Lakshman’s system does not indicate whether any of the filters have a common length. Accordingly, claim 2 is allowable at least for this additional reason.

3. Response to the Rejection of Claims 3-26

Claims 3-11 depend from claim 1 and are allowable for the same reasons as claim 1.

Claim 12 recites a method comprising “processing the identification to select at least two of a plurality of fixed length filters to filter the at least two clusters.” Claim 12 is also allowable for the same reasons as claim 1. Claims 13-17 depend from claim 12 and thus are also allowable.

Claim 18 recites "processing the identification to select at least two of a plurality of fixed length filters to filter the at least two clusters." Claim 18 is also allowable for the same reasons as claim 1. Claims 19-22 depend from claim 18 and are thus also allowable.


Claim 23 recites "(b) processing the identification of the first cluster of discrete data to select a first fixed length filter having an offset value corresponding to the first cluster from a plurality of fixed length filters to filter the first cluster of discrete data; [and] (c) processing the identification of the second cluster of discrete data to select a second fixed length filter having an offset value corresponding to the second cluster from the plurality of fixed length filters to filter the second cluster of discrete data." Claim 23 is thus also allowable for the same reasons as claim 1. Claims 24-26 depend from claim 23 and thus are allowable.

CONCLUSION

All rejections having been addressed, Applicant respectfully submits that the instant application is in condition for allowance, and respectfully solicits prompt notification of the same. Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the number set forth below.

Respectfully submitted,

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